

I B R 1 9 7 1

GOALS                   The advancement of scientific knowledge and application of the Behavioral Sciences to human affairs through laboratory and field research, graduate education, and scientific publication.

ORGANIZATIONAL        Founded in 1962, the IBR is an integral part STATUS                   of Texas Christian University, the IBR functions autonomously, reporting to the Administration through the Vice Chancellor for Advanced Studies and Research.

PROGRAM                Research grants and contracts from Federal agencies and industry, principally, in personality, social and environmental psychology, psychophysiology, epidemiology and human ecology, organizational and personnel research, social and health program evaluation, and population research.

#### FACILITIES

Located on the East Campus of Texas Christian University, the IBR occupies 3 buildings with 12,000 square feet. Special features include the IBR LIBRARY, with over 3000 books, 40 journals, and an extensive file of Air Force, Army, Navy, NASA and other technical report series, the BIOMEDICAL RESEARCH LABORATORY, with recording equipment, analog-to-digital conversion equipment, special purpose computers, and extensive testing and experimental equipment, a comprehensive COMPUTER PROGRAM LIBRARY, and extensive DOCUMENT STORAGE facilities.

#### PUBLICATIONS

IBR REPORTS, a technical report series based on staff and student research completed under grants, contracts, and independent study, are distributed to a regular mailing list and in most cases are condensed for formal publication. TCU PRESS - BEHAVIORAL SCIENCE MONOGRAPH SERIES, founded in 1971, published irregularly as single volumes, includes substantive studies as well as methodological and theoretical contributions to the behavioral sciences. The IBR also houses the publication office of MULTIVARIATE BEHAVIORAL RESEARCH, a quarterly journal published through the TCU Press by the Society for Multivariate Experimental Psychology.

SPONSORS OF FUNDED RESEARCH - 1971

Federal Agencies

National Institute of Mental Health  
US Office of Education  
National Center for Health Statistics  
Family Planning Services, HEW, Region 6  
Office of Naval Research  
National Aeronautics and Space Administration

Industry

American Airlines, Inc.  
Eastern Airlines, Inc.  
First National Bank, Fort Worth  
Fort Worth National Bank  
Allied Radio Shack Division, Tandy Corporation

Local Government and Community Agencies

City of Fort Worth  
Tarrant County Hospital District  
Tarrant County Mental Health - Mental  
Retardation Center

FUNDED RESEARCH. Expenditures in 1971.

Drug Abuse Reporting Program. Contract No. HSM-42-69-6 (NIMH)	\$162,421.
National Directory of Drug Abuse Treatment Facilities. Contract No. MH-42-70-37 (NIMH)	39,892.
Research Training Grant in Medical Psychology. RH-2 (Rehabilitation Services Administration)	31,460.
Critical Appraisal of Research in the Personality, Emotions, Motivation Domain. OE Grant 2665 (USOE)	12,978.
Control of hyperactive behavior in children through attention training and regulation of respiratory behavior. Contract No. OEC 6-71-0541	4,787.
Objective Scales for the TAT in the Health Examination Survey. Contract No. PH 109-66-75 (NCHS)	17,788.
Evaluation of Tarrant County Family Planning Program. Subcontract with Tarrant County Hospital District.	65,551.
Social Structure and Group Behavior in Extended- Duration Space Missions. NASA Grant No. 44-009-008	42,133.
Airline Organizational and Personnel Research. (American Airlines, Eastern Airlines)	48,463.
Organizational Research in Industry. (First National Bank of Fort Worth)	7,355.
Demographic and Epidemiological Aspects of Patient Demands upon Public Mental and Physical Health Facilities in Tarrant County, Texas. (Tarrant County Hospital District and Tarrant County MH-MR Center)	17,430.
Total	\$450,258.

## IBR STAFF

### Faculty Members

S. B. Sells, Ph.D. Research Professor and Director  
R. G. Demaree, Ph.D. Professor of Psychology, Research Scientist  
George W. Joe, Ed.D. Assistant Professor Psychology, Associate  
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Steven G. Cole, Ph.D. Assistant Professor of Psychology, Associate  
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### Research Staff Members

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James McGuinness. NASA  
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## IBR RESEARCH PROGRAM

### DRUG ABUSE

#### Drug Abuse Reporting Program (NIMH)

This is a national program, initiated in June 1969 following a period of development, in which patient characteristics and progress through treatment have been reported by Federally supported narcotic drug abuse treatment programs as a data base for program management (by NIMH) and research on treatment effectiveness (by IBR). In 1971, 35 treatment programs were reporting and the expected number by mid 1972 is 45. Through November, 1971, 17,877 patients were included in the program master file.

The Program involves a system for accounting for individual patients, entered into treatment, by means of two reporting forms. The initial Admission Form, a background history, describes patient characteristics and is the basis for a patient typology. The bi-monthly Status Evaluation Form provides progress information on treatment delivered as well as on patient behavior in respect to employment, drug and alcohol abuse, criminality, and other significant outcome factors used to evaluate treatment effectiveness. The information is maintained in a periodically update computer file which is used continually as the data source for operating reports on patient loads, treatments delivered, and outcome statistics, as well as for studies of the effectiveness of various treatment approaches and patterns of treatment components for various categories of patients.

Key Staff. Principal Investigator, Dr. Sells; Project Director, Mrs. Curby; Programmer, Mr. Kee; Programming Consultant, Mr. Jim Adair; Research Staff, Dr. Joe; Coordinator, Miss Watson, Mr. Retka; Supervisors, Miss Glick, Mrs. Brittain, Mrs. Harris.

#### National Directory of Drug Abuse Treatment Facilities (NIMH)

Escalation of drug use, including extension of the drug problem into broader segments of the population and increasing use of a greater variety of drugs, has led to significant expansion of drug treatment facilities throughout the country. As a result the first Directory of Narcotic Addiction Treatment Agencies in the United States, 1968-1969, by Deena Watson and S. B. Sells,

published in 1970, rapidly became outdated. In order to provide information to those seeking and making referral and at the same time to have available a nationwide register of treatment facilities, the National Institute of Mental Health commissioned the Institute of Behavioral Research to compile a new and more comprehensive Directory. The resultant National Directory of Drug Abuse Treatment Programs, scheduled for publication in 1972, was based on an extensive nationwide survey in which some 7,000 agencies were screened. Approximately 1,500 identified themselves as drug treatment programs and contributed relevant program data. Information on each of these programs was collected by means of mailed questionnaires and telephone followup. Basic information on program organization, admission requirements, staffing, treatment modalities, and clientele were extracted and compiled for use in the Directory. The Directory was prepared on IBM magnetic typewriter tapes for transfer of final copy to the Government Printing Office in Washington, D.C. in November 1971. Further analysis of information from this extensive data base is in progress.

Key Staff. Program Director, Deena Watson; Research Assistant, Janice Neman.

#### OTHER HEALTH-RELATED BEHAVIORAL RESEARCH

##### Research Training Grant in Medical Psychology (RSA)

This five year grant for doctoral training in psychology, with emphasis on research related to the behavioral aspects of heart disease, stroke, and cancer, was terminated in May, 1971. It contributed immeasurably to the development of IBR research in health-related areas, which is reflected in the drug-abuse, family planning, quality of life programs and in the investigations undertaken in the Biomedical Laboratory, which was created in response to needs generated by this Program.

Eight students, who held research fellowships under this grant, received Ph.D. degrees in Psychology during 1970 and 1971. Two had completed all requirements in 1971 and are scheduled to receive their doctorates in 1972. Two additional students completed M.A. degrees under this Program.

The doctoral graduates of this Program are as follows:

Gary E. Brown	1970
Thomas S. Brown	1970
Larry Jernigan	1970
Sam H. Lane, III	1970
Henry Orloff	1970
D. Dwayne Simpson	1970
Lester Barnett	1971
Ludy T. Benjamin	1971
Edwin T. Cornelius	1972
Ronald Neman	1972

Key Staff. Director, Dr. Sells; Coordinator of Training, Dr. Demaree; Assistant Professor, Dr. Joe.

Control of Hyperactive Behavior in Children Through Attention Training and Regulation of Respiratory Behavior. (USOE-Regional Research Program)

Beginning July, 1971, this one-year project is a joint undertaking by the IBR and TCU's Starpoint School (for children with learning disabilities).

The investigation is designed to obtain pilot data on a method for training children to develop control over hyperactive behavior and attention. The training method constitutes essentially a psychophysiological approach involving biofeedback and behavior modification principles and was developed partially on the basis of previous research by Dr. Simpson concerning patterns of respiratory behavior. Results obtained to date suggest that the training procedure may be a useful and promising method for helping children to learn self-control of disruptive behaviors.

Key Staff. Dr. Simpson, Principal Investigator; Arnold Nelson, Graduate Research Fellow; Dickie Harris, Kenneth Gillaspay, Marcia McMurray, Research Assistants; Henry Patterson, Ph.D., Principal, Starpoint School and Laura Lee Crane, Assistant Principal, Cooperating Officials.

## FAMILY PLANNING

### Family Planning Program Evaluation and Research (Subcontract to TCHD)

The Institute's activity in population research began in June of 1970 when John Peter Smith Hospital (JPSH), a unit of the Tarrant County Hospital District, in cooperation with the Planned Parenthood Center of Fort Worth and other related community agencies, initiated a family planning program for the medically indigent population of Tarrant County. A HEW grant to the TCHD included the Institute of Behavioral Research (IBR) as a subcontractor, with a 1971 budget of \$55,000.

Under the direction of Dr. Cole, the evaluation of the family planning program has been divided into separate but overlapping phases. One phase, with Ellen Flexman as Research Assistant, has focused on the development of a computerized data and case file. The major case records were designed as integral parts of this data system to permit efficient measurement and analysis of outcomes as well as maintenance of the case files. The second phase has focused on problem areas in the operation of the family planning programs and on diagnosis as well as development and testing of appropriate solutions. Dr. Cole, with the assistance of Ann Thom, Research Assistant, and Candyce Greer, Research Fellow, completed diagnostic studies of the "organizational climate" of the Family Planning Clinic at JPSH and of the Planned Parenthood Center of Fort Worth. In addition, under the supervision of Candyce Greer, Rosemary Nelson, Graduate Assistant, and David Bryon, Research Fellow, three special studies were undertaken to investigate pressing operating problems: (1) to identify factors that discriminate between participants who continue in the program and others who drop out, (2) to assess attitudes of community leaders in Tarrant County toward family planning and the family planning program, and (3) to investigate significant aspects of the vasectomy clinic at JPSH with respect to individual as well as community acceptance. The vasectomy project was not yet completed, but the experience gained from the JPSH clinic was utilized in the establishment of a similar clinic in Arlington, Texas, and in the construction of an information packet that has been used by one other program to assist in the establishment of their vasectomy clinic. Preliminary reports of the above-mentioned studies were presented at a symposium on family planning research and social psychology, chaired by Dr. Cole, at the 1971 meeting of the American Psychological Association, in Washington, D.C.

Key Staff. Project Director, Dr. Cole; Research Fellows, Candyce Greer, Rosemary Nelson, David Bryon; Research Assistant, Ellen Flexman, Ann Thom.

#### PERSONALITY AND SOCIAL PSYCHOLOGY

Critical Appraisal of Research in the PEM (Personality, Emotions, Motivation Domain) (USOE)

The task accepted in this grant is to survey the PEM domain and to produce a set of recommendations for critically needed research. Following consultation with an advisory committee consisting of Robert W. Beezer (USOE), Raymond B. Cattell (U. Illinois), J. McV. Hunt (U. Illinois), Donald W. MacKinnon (U. Cal., Berkely), Warren T. Norman (U. Michigan), and S. B. Sells (TCU), Principal Investigator, it was agreed that literature review would be inappropriate and a mode of operation was adopted involving the participation of task reviews in selected areas, with members appointed who were identified as leading investigators in their respective areas. The task groups were asked to consider the state of research in their areas and to recommend needed research in the light of their knowledge and experience.

This Program was initiated in 1970 and to date reports have been completed by four task groups, on Interpersonal Process (Donn Byrne, Purdue Univ., Chairman), Behavior Genetics (John C. Loehlin, U. Texas, Chairman), Character Development (Richard L. Gorsuch, Peabody College, Chairman), and Stress and Anxiety (Charles D. Spielberger, Florida State University, Chairman). A number of additional task groups are scheduled to report during the Spring and Summer of 1972. Reports will be distributed first as technical reports, by IBR, and later combined for publication in a book.

Key Staff. Principal Investigator, Dr. Sells; Co-Director, Dr. Demaree.

Objective Scales for the TAT in the Health Examination Survey (NCHS)

The IBR has for several years been engaged in research related to the national health survey activities of the National Center for Health Statistics. This research produced a monograph evaluating

the psychological measures in Cycle II of the Health Examination Survey, published by the Center in 1966 (NCHS Series 2, No. 15), and in addition, two IBR technical reports that summarized previous research on the development of objective scoring scales for the Thematic Apperception Test, a major psychological measure used in Cycle II (age range 6 to 11) and again in Cycle III (age range 6 to 18) of the Health Examination Survey (Sells and Cox, 1966, and Brown and Sells, 1970). A revised report based on the Brown and Sells study was completed by Ronald Neman and is in preparation for publication by NCHS (Neman, Brown, and Sells, 1971). The final phase of the project, has been a primary responsibility of Janice Neman on the Cycle III data since April, 1971. This phase has consisted of the scoring and analysis of the Cycle III TAT data, and involves the extension of language and emotional adjustment scales developed in Cycle II to the adolescent range, as well as the construction of national norms for this age group.

Key Staff. Research Assistant, Janice Neman.

#### INDUSTRIAL PERSONNEL AND SOCIAL PSYCHOLOGY

##### Airline Organizational and Personnel Research

Since 1962 the IBR has maintained a program of personnel and organizational research related directly to airline and aerospace operations. The principal sponsors have been American and Eastern Airlines. Airline personnel research programs have included continuing investigations for development of personnel selection batteries (pilot, stewardess, mechanic, agent, management, specialist, unskilled, and semiskilled), personnel assessment studies, performance measurement, and related research. Organizational studies have included the development and extensive administration of measures of organizational climate for normative and analytic purposes, and the conduct of training evaluation and management studies. The benefit of these studies to the airlines has involved compliance with Federal requirements concerning nondiscrimination in hiring and maintenance of higher standards of quality and efficiency in the assignment and utilization of personnel.

Key Personnel. Principal Investigator, Dr. Sells; Project Directors, Mr. Murdy and Mr. Cornelius; Research Assistants, Mrs. McReynolds, Mr. Norton, Mr. Giles.

## Management Surveys

IBR staff members have carried out a number of management surveys for organizations such as the Fort Worth National Bank, the First National Bank of Fort Worth, the Allied Radio Shack Division of the Tandy Corporation, and others. The typical format of these studies involves 1) consultation with management to define problem areas, 2) preparation, administration, and analysis of survey instruments, 3) reporting of results for feedback to employee groups and management, employee discussions and recommendations to management, based on their interpretation of results, 4) management response and action, and 5) followup survey to measure change in attitudes and satisfaction. These surveys were first conducted with airline clients and are now available for corporations, institutions (hospitals, schools), and other types of organizations (military units, naval ships, clinics).

Key Personnel: Dr. Sells, Mr. Murdy, Mr. Cornelius.

## Social Structure and Group Behavior in Extended-Duration Space Missions (NASA)

Previous research under this grant resulted in the development of a social system model for organizational study and in particular, for the extended-duration space ship, that has been instrumental in focusing attention on the unique environment-crew interaction of the space ship as distinct from small groups "in general" and from isolation and confinement "in general." Dr. Sells, Principal Investigator of this project, has been a member of the Steering Committee of the National Academy of Science Committee on Long Duration Space Flight since 1967. This Committee, chaired by Donald B. Lindsley (UCLA) undertook a study of the behavioral, psychological, physiological, and medical factors of manned space missions up to two years' duration and completed its study with a book scheduled for publication in 1972. Dr. Sells' contributions include two chapters, 3. Skilled Performance, with N. Findikyan (updated from an earlier paper in 1967), and 9. A Social System Approach to Long-Duration Missions, with E. K. Gunderson.

Other previous research involved a series of studies on "personal space," by Dr. James Rawles, Dr. Ronald Trego (Ph.D. 1971), and Thomas McGaffey (Ph.D. expected 1972). During 1971 emphasis was placed on personnel selection of crew members for simulated space missions of long duration and on related research.

In relation to selection a research review of factors related to endurance of isolation and confinement, by Ronald Trego, was used as the basis for composition of a comprehensive battery of personality inventories and scales that was administered to several hundred Army ROTC cadets at TCU and at the University of Texas at Arlington. A research report, presenting normative data and personality factors derived from this study has been under preparation by Dr. Demaree and Mr. Cornelius.

In relation to selection, as well as to endurance of long-duration confinement and isolation, attention has been devoted to another area, involving psychophysiological measurement and experimentation. This involves research by Dr. Simpson, assisted by Graduate Research Assistants James McGuinness and Air Force Captain Dickie Harris, reflecting the currently widespread popular as well as professional interest in meditation, biofeedback, and relaxation techniques, particularly with reference to the notion of developing control over physiological functions. The behavioral benefits and potential application of such techniques involve identification of skills in their use as well as ability to practice them in the stressful, enforced isolation of space flight.

In one study by Dr. Simpson, Dr. Donald Dansereau (Department of Psychology), and Research Fellows Gary Giles and James McGuinness, a comparison was made of physiological, psychological, and behavioral effects of different relaxation techniques (progressive relaxation, transcendental meditation, and "free" relaxing). Studies currently in progress concern the use of different respiratory patterns during relaxation for slowing down heart rate, biofeedback and relaxation as a method of learning to control physiological responses to stress, and the relation of respiratory patterns to stimulus detection and task performance.

Key Staff. Principal Investigator, Dr. Sells; Research Scientists, Dr. Demaree, Dr. Simpson; Research Fellows, Mr. Cornelius, Mr. Nelson, Mr. McGuinness, Captain Harris, Mr. Giles; Cooperating Scientist, Dr. Dansereau.

#### URBAN STUDIES

#### Social Health Indicators and Quality of Life Research

With the support of the Tarrant County Hospital District and the Tarrant County Mental Health and Mental Retardation Center,



an important study has been completed that has wide implications for research related to measurement of community problems in the health and social behavior areas and planning of services related to needs estimated from such measures.

This study, under the joint direction of Dr. Demaree and Dr. Jones, developed a computer program for the assignment of patients to census tracts on the basis of address. In addition, seven social indicators were constructed and each tract given a score on these indices. On the basis of such scores, tracts were grouped into meaningful social areas. Social index scores were related to a number of problems and found to be highly effective predictors of incidence rates of John Peter Smith Hospital patients, MHR patients, tuberculosis, venereal disease and other problems. Plans have been made to present papers on the results of the research to the annual conference on Mental Health Statistics, to the American Psychological Association Convention, and to the Southwest Regional Meeting of the American Orthopsychiatric Association. Sources of support for continuation and expansion of this effort are being investigated.

Key Staff. Co-Directors, Dr. Demaree, Dr. Jones.

IBR PUBLICATIONS AND REPORTS - 1971

BOOKS:

Watson, Deena and Sells, S. B. National Directory of Drug Abuse Treatment Programs. Contract No. HSM 42-70-37, NIMH (In press).

CONTRIBUTIONS TO BOOKS:

Sells, S. B. Computer Applications in the Behavioral Sciences, in the Lindsey, J. F. and Townsend, J. C., Eds., Biomedical Research and Computer Applications in Manned Space Flight. NASA SP-5078. pp 19-33.

Sells, S. B. Capsule Society - New Problems for Man in Space on Long-Duration Missions, in Biotechnology (Proceedings of NASA Conference at Blacksburg, Virginia, 14-18 August, 1967). National Aeronautics and Space Administration, Washington, D.C., NASA-SP 205, 1971.

BEHAVIORAL SCIENCE MONOGRAPHS:

Maddux, James F., Berliner, Arthur and Bates, William F. Engaging Opioid Addicts in a Continuum of Services. A Community-Based Study in the San Antonio Area. National Institute of Mental Health Clinical Research Center, Fort Worth, Texas, January 1971.

IBR TECHNICAL REPORTS:

Cole, S. G., Bryon, D., Greer, C. D. and Nelson, R. Initial Report of the Evaluation of the Tarrant County Family Planning Program. IBR Report No. 71-6. 145 p.

Cornelius, Edwin T. The Segments - Per Call Ratio as an Objective Performance Criterion for Eastern Airlines Reservation Agents: A Preliminary Report. IBR Report No. 71-13. 35 p.

Greer, Candyce D., Cole, Steven G., and Woodward, J. Arthur. Factors Associated with Failure to Keep Family Planning Appointments at John Peter Smith Hospital. IBR Report No. 71-17. 60 p.

- \*Joe, George W., Kee, Charles, Curby, Anne and Sells, S. B. Drug Usage Among Patients While in Early Months of Methadone Maintenance Treatment: A Preliminary Report.  
IBR Report No. 71-1. 25 p.
- \*Joe, George W., Kee, Charles, Sells, S. B. and Curby, Anne. Patient Behavior in Early Months of Treatment for Narcotic Addiction: I.  
IBR Report No. 71-2. 85 p.
- Murdy, Lee B. and Sells, S. B. American Airlines Maintenance and Engineering - Management Specialist Organizational Climate and Attitude Survey. Volume I. Summary Report and Major Data Presentation.  
IBR Report No. 71-14. 93 p.
- Murdy, Lee B. and Sells, S. B. Chief Purser Test Validation Study. A Preliminary Report on a Small Sample.  
IBR Report No. 71-15. 38 p.
- Murdy, Lee B. and Sells, S. B. Organizational Climate and Employee Attitude Survey - American Airlines Flight Academy Instructors.  
IBR Report No. 71-16. 56 p.
- Nelson, Arnold E. and Simpson, D. Dwayne. Alteration of Respiration during a Reaction-Time Task.  
IBR Report No. 71-10. 17 p.
- Neman, Ronald and Lane, S. H. Preference for Complexity in Visual and Linguistic Domains.  
IBR Report No. 71-4. 30 p.
- Neman, Ronald D., Brown Thomas S. and Sells, S. B. National Health Examination Survey - TAT Developmental and Adjustment Scales Standardization Research and National Norms for the Age Range 6 through 11.  
IBR Report No. 71-7. 200 p.
- Sells, S. B. and Nelson, Rosemary. Performance Appraisal, An Annotated Bibliography.  
IBR Report No. 71-3. p.
- Sells, S. B. and Will, Donald P. Jr. Accidents, Police Incidents, and Weather. A Further Study of the City of Fort Worth, Texas, 1968.  
IBR Report No. 71-5. 30 p.
- Sells, S. B., Murdy, Lee B. and Cornelius, Edwin T., III. A Study of Organizational Climate and Employee Satisfaction.  
IBR Report No. 71-9. 161 p.

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\*Restricted Distribution

Simpson, D. Dwayne. Patterns of Respiratory Behavior.  
IBR Report No. 71-11. 20 p.

Simpson, D. Dwayne, Dansereau, Donald F. and Giles, Gary J. A Preliminary Evaluation of Physiological and Behavioral Effects of Self-Directed Relaxation.  
IBR Report No. 71-12. 55 p.

PERIODICAL ARTICLES:

Joe, George W. Comment on Overall and Speigel's "Least Squares Analysis of Experimental Data," Psychological Bulletin, 1971, 75, No. 5, pp. 364-366.

Sells, S. B., Demaree, R. G. and Will, Donald P., Jr. Dimensions of Personality: II Separate Factor Structures in Guilford and Cattell Trait Markers Multivariate Behavioral Research, April, 1971, 6, pp. 135-185.

Sells, S. B. The Educated Person. A Biased View. This Is TCU. Summer 1971, Number 4.

Murdy, L. B., Toole, David L., Sells, S. B., Gavin, J. F. Validity of Personality and Interest Inventories for Stewardess. Personnel Psychology. (In press).

Toole, David L., Murdy, L. B., Gavin, J. F. and Sells, S. B. The Differential Validity of Personality, Personal History and Aptitude Data for Minority and Nonminority Employees. Personnel Psychology. (In press).

WORKING PAPERS:

Cole, Steven G., Thom, Vicki A., Greer, Candyce D. Organizational Climate Survey #1 for the Family Planning Clinic at John Peter Smith Hospital. February 1971, 45 p.

Cole Steven G., Thom, Vicki A., Greer, Candyce D. Organizational Climate Survey #1 for the Planned Parenthood Center. February 1971, 45 p.

Simpson, D. Dwayne. Biofeedback and Heart Rate Control. December 1971, 9 p.

PAPERS PRESENTED AT MEETINGS:

- Demaree, Robert G. Universe Principal Components Psychometric Society Meeting. St. Louis, Mo., April 7, 1971.
- Demaree, Robert G., Jernigan, Larry R. and Woodward, Arthur. Equiloading Component of a Set of Measures. American Psychological Association 79th Annual Convention, September 3-7, 1971, Washington, D.C.
- Demaree, Robert G. Direction of Scoring of Items. Texas Psychological Association Convention, December 3, 1971, Corpus Christi, Texas.
- Jernigan, Larry R., Demaree, Robert G. Item-Factor Analysis of the Guilford-Zimmerman Treatment Survey. American Psychological Association, 79th Annual Convention, September 3-7, 1971, Washington, D.C.
- Joe, George W. Relationships Among Several Sets of Partial Regression Weights. American Psychological Association, 79th Annual Convention, September 3-7, 1971, Washington, D.C.
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